

6560-50-P

### ENVIRONMENTAL PROTECTION AGENCY

**40 CFR Part 300** 

[EPA-HQ-SFUND-2005-0011; FRL-9981-02-Region 1]

National Oil and Hazardous Substances Pollution Contingency Plan;

National Priorities List: Deletion of the Old Southington Landfill Superfund Site

**AGENCY**: U.S. Environmental Protection Agency (EPA).

**ACTION**: Proposed rule; notice of intent.

SUMMARY: The U.S. Environmental Protection Agency (EPA) Region 1 is issuing a Notice of Intent to Delete the Old Southington Landfill Superfund Site (Site) located at Old Turnpike Road, Southington, Connecticut (CT), from the National Priorities List (NPL) and requests public comments on this proposed action. The NPL was promulgated pursuant to Section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended, is an appendix of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The EPA and the State of Connecticut, through the CT Department of Energy and Environmental Protection (CT DEEP), have determined that all appropriate response actions under CERCLA, other than operation and maintenance, monitoring, and five-year reviews, have been completed. However, this deletion does not preclude future actions under CERCLA.

**DATES**: Comments must be received by [insert date 30 days after date of publication in the Federal Register].

**ADDRESSES:** Submit your comments, identified by Docket ID no. EPA-HQ-SFUND-2005-0011, by one of the following methods:

- Online: http://www.regulations.gov Follow on-line instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit https://www.epa.gov/dockets/commenting-epa-dockets.
- Email: silva.almerinda@epa.gov or Purnell.ZaNetta@epa.gov
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 Hand delivery: US EPA, Region 1 – New England, 5 Post Office Square, Suite 100, Boston, MA. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID no. EPA-HQ-SFUND-2005-0011.

EPA's policy is that all comments received will be included in the public docket without change and may be made available online at http://www.regulations.gov, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through http://www.regulations.gov or e-mail. The http://www.regulations.gov Website is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through http://www.regulations.gov, your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include

your name and other contact information in the body of your comment and with any disk

or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties

and cannot contact you for clarification, EPA may not be able to consider your comment.

Electronic files should avoid the use of special characters, any form of encryption, and be

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**Docket:** All documents in the docket are listed in the http://www.regulations.gov index.

Although listed in the index, some information is not publicly available, i.e., CBI or other

information whose disclosure is restricted by statute. Certain other material, such as

copyrighted material, will be publicly available only in the hard copy. Publicly available

docket materials are available either electronically in http://www.regulations.gov or in

hard copy at:

U.S. EPA Region 1 – New England, Superfund Records Center,

5 Post Office Square, Suite 100,

Boston, MA 02109,

Phone: 617–918–1440,

*Hours:* Monday—Friday: 9:00 a.m.–5:00 p.m., Saturday and Sunday—Closed.

**Southington Public Library**,

255 Main Street,

Southington, CT,

Phone: 860-628-0947

*Hours:* Monday – Thursday 9:00 a.m. – 9:00 p.m., Friday – Saturday 9:00 a.m. –

5:00 p.m., and Sunday Closed.

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#### **SUPPLEMENTARY INFORMATION:**

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### I. Introduction

EPA Region 1 announces its intent to delete the Old Southington Landfill Superfund Site from the National Priorities List (NPL) and requests public comment on this proposed action. The NPL constitutes Appendix B of 40 CFR part 300 which is the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), promulgated by EPA pursuant to Section 105 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, as amended. EPA maintains the NPL as the list of sites that appear to present a significant risk to public health, welfare, or the environment. Sites on the NPL may be the subject of remedial actions financed by the Hazardous Substance Superfund (Fund). As described in 40 CFR 300.425(e)(3) of the NCP, sites deleted from the NPL remain eligible for Fund-financed remedial actions should future conditions warrant such actions. EPA will accept comments on the

proposal to delete this site for thirty (30) days after publication of this document in the **Federal Register**.

Section II of this document explains the criteria for deleting sites from the NPL.

Section III discusses procedures that EPA is using for this action. Section IV discusses the Old Southington Landfill Superfund Site and demonstrates how it meets the deletion criteria.

### II. NPL Deletion Criteria

The NCP establishes the criteria that EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425(e), sites may be deleted from the NPL where no further response is appropriate. In making such a determination pursuant to 40 CFR 300.425(e), EPA will consider, in consultation with the State, whether any of the following criteria have been met:

- responsible parties or other persons have implemented all appropriate response actions required;
- all appropriate Fund-financed response under CERCLA have been implemented, and no further response action by responsible parties is appropriate; or
- iii. the remedial investigation has shown that the release poses no significant threat to public health or the environment and, therefore, the taking of remedial measures is not appropriate.

Pursuant to CERCLA Section 121(c) and the NCP, EPA conducts five-year reviews to ensure the continued protectiveness of remedial actions where hazardous substances, pollutants, or contaminants remain at a site above levels that allow for

unlimited use and unrestricted exposure. EPA conducts such five-year reviews even if a site is deleted from the NPL. EPA may initiate further action to ensure continued protectiveness at a deleted site if new information becomes available that indicates it is appropriate. Whenever there is a significant release from a site deleted from the NPL, the deleted site may be restored to the NPL without application of the Hazard Ranking System.

#### III. Deletion Procedures

The following procedures apply to deletion:

- (1) EPA consulted with the State before developing this Notice of Intent to Delete;
- (2) EPA has provided the State 30 working days for review of this notice prior to publication of it today;
- (3) In accordance with the criteria discussed above, EPA has determined that no further response is appropriate;
- (4) The State has concurred with deletion of the Site from the NPL;
- (5) Concurrently with the publication of this Notice of Intent to Delete in the Federal Register, a notice is being published in a major local newspaper, The Southington Observer. The newspaper notice announces the 30-day public comment period concerning the Notice of Intent to Delete the Site from the NPL; and

(6) The EPA placed copies of documents supporting the proposed deletion in the deletion docket and made these items available for public inspection and copying at the Site information repositories identified above.

If comments are received within the 30-day public comment period on this document, EPA will evaluate and respond appropriately to the comments before making a final decision to delete. If necessary, EPA will prepare a Responsiveness Summary to address any significant public comments received. After the public comment period, if EPA determines it is still appropriate to delete the Site, the Regional Administrator will publish a final Notice of Deletion in the **Federal Register**. Public notices, public submissions and copies of the Responsiveness Summary, if prepared, will be made available to interested parties and in the Site information repositories listed above.

Deletion of a site from the NPL does not itself create, alter, or revoke any individual's rights or obligations. Deletion of a site from the NPL does not in any way alter EPA's right to take enforcement actions, as appropriate. The NPL is designed primarily for informational purposes and to assist EPA management. Section 300.425(e)(3) of the NCP states that the deletion of a site from the NPL does not preclude eligibility for future response actions, should future conditions warrant such actions.

### IV. Basis for Site Deletion

The following information provides EPA's rationale for deleting the Site from the NPL:

## Site Background and History

CERCLIS ID: CTD980670806

The Old Southington Landfill Superfund Site is in the Town of Southington, Hartford County, Connecticut, and is approximately 13 miles southwest of Hartford, Connecticut. From 1920 to 1967, residents and area businesses used portions of the landfill for disposal of waste materials. During this time frame, the landfill was known as the Old Turnpike Landfill. Based upon historical information, Remedial Investigation (RI) data, and differences in ownership between the northern and southern portion of the Site, it is clear that the northern and southern portions of the landfill were used for distinct and separate purposes. The northern portion of the landfill was a "stump dump" that was used for the disposal of wood and construction debris. The southern portion of the landfill was used throughout the period the landfill was in operation for the co-disposal of municipal and industrial waste. Historical information, interviews with current and past Town employees, and information contained in public documents on disposal practices indicate that for a short period of time (1964-1967) two areas (SSDA 1 and SSDA 2) in the southern portion of the landfill were used for disposal of semi-solid industrial wastes. In 1967 (or shortly thereafter), the landfill was "closed" consisting of: compacting disposed material, covering with 2 feet of clean fill, and seeding for erosion control.

Between 1973 and 1980, the landfill property was subdivided and sold for residential and commercial development. Several residential and commercial buildings were built on the Site and on adjacent areas.

The landfill is located approximately 700 feet southeast of the former Production Well No. 5, which was installed in 1965 by the Town of Southington Water Department and was used as a public water supply. The Connecticut Department of Public Health and Addiction Services (then the Department of Health Services) sampled Well No. 5 on several occasions between December 1978 and March 1979. Analyses of the samples

indicated the presence of chlorinated volatile organic compounds (VOCs). Because of the detection of 1,1,1-trichloroethane (TCA) at levels that exceeded State standards, Well No. 5 was closed in August 1979. The well has been permanently closed since that time. A more detailed description of the Site history can be found in Section 1 of the Supplemental Remedial Investigation (SRI) Report (Kleinfelder, May 2006).

## 1. History of CERCLA Enforcement Activities

In February 1980, EPA authorized a hydrogeologic investigation aimed at defining the nature and extent of contamination in groundwater in the vicinity of Well No. 5. Analysis of groundwater samples collected from two monitoring wells installed between the landfill and Well No. 5 indicated the presence of VOCs (Warzyn Engineering, Inc., 1980). In November 1980, the Connecticut Department of Environmental Protection (now the CT DEEP) collected soil samples from a manhole excavation within the industrial park located on land that had previously been part of the landfill. Analysis of the soil samples indicated the presence of chlorinated and non-chlorinated VOCs.

The Old Southington Landfill was formerly known as the Old Turnpike Landfill. Based on the above findings and a hazardous ranking evaluation performed in 1982, EPA subsequently proposed the Site be placed on the National Priorities List (NPL), pursuant to Section 105(8)(b) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9605(8)(b). On September 8, 1983, the Site was proposed to the NPL (48 FR 40674) and on September 21, 1984, the Old Turnpike Landfill was final listed on the NPL as the Old Southington Landfill Superfund Site (49 FR 37070). The Site includes two Operable Units (OUs); OU1 includes the landfill cap

and permanent relocation of all on-site homes and businesses; and OU2 includes the groundwater.

In 1987, EPA entered into an Administrative Order on Consent (AOC) with three Potentially Responsible Parties (PRPs) to define the nature and extent of Site contamination. In 1993, the PRPs prepared a Remedial Investigation/Feasibility Study report (ES&E, 1993) that provided results of the RI, a Human Health Risk Assessment (HHRA), an Ecological Risk Assessment (ERA), and a Feasibility Study (FS). EPA issued an Addendum to the RI/FS Report in 1994.

In September 1994, EPA issued the Interim Remedial Action for Limited Source Control Record of Decision (ROD) that addressed the landfill and included the following major remedy components and remedy objectives:

- Relocation of existing residences and businesses located on top of the landfill;
- Construction of a synthetic cap over the landfill to prevent human contact
  with contaminated subsurface soils, stop rainwater infiltration through the
  soil to the groundwater, and allow for the containment and collection of
  landfill gas;
- Excavation and consolidation of a highly contaminated area "hot spot" in a lined cell underneath the landfill cap;
- Removal of all buildings from the landfill;
- Installation of a soil gas collection system;
- Performance of long-term operation and maintenance (O&M);
- Performance of long-term monitoring;

- Development and implementation of institutional controls to ensure the remedy integrity by controlling future Site use and access; and
- Five-Year Reviews.

The remedy selected in the 1994 ROD also required additional groundwater studies be undertaken concurrent with the implementation of the cap on the landfill. In addition, because it was uncertain if the landfill gas collection system would be effective and protective of human health, the 1994 ROD required that an additional evaluation be conducted.

In 1998, a Consent Decree (CD) was entered between EPA and approximately 320 PRPs; two PRPs became the Performing Settling Defendants (PSDs) while the remainder were Contributing Settling Defendants. Pursuant to the CD, the PSDs were required to implement the remedy selected in the 1994 ROD. Construction of the remedy selected in the 1994 ROD was completed in 2001. Operation and maintenance as well as long-term monitoring are currently being conducted by the Performing Settling Defendants (PSDs). Institutional controls, consisting of Environmental Land Use Restrictions (ELURs), were implemented in 2010 and 2018 for parcels occupied by the landfill cap. Five-Year Reviews are being conducted by EPA. In June 1999, EPA entered into two additional settlements: one with six parties and the other with 119 de minimis parties who all agreed to contribute to the cost of the remedial action in the 1994 ROD. Per the 1994 ROD, the PSDs performed the additional groundwater studies (i.e., a second RI/FS) to address the remaining issues at the Site under the 1998 CD. Accordingly, in 1999, the PSDs initiated the Supplemental Groundwater Investigations (SGI) which was completed in 2006. The 2006 SRI and the Amended Feasibility Study (AFS), (EPA,

2006) were completed in June 2006. In September 2006, a Final ROD was issued to address potential vapor intrusion risks from contaminants located in shallow groundwater (Operable Unit 2 [OU2]).

The 2009 CD required the PSDs to develop the Remedial Design and construct the selected remedy for the 2006 ROD. As part of the Remedial Design, a vapor intrusion groundwater investigation was completed for two properties immediately downgradient of the landfill that determined only vinyl chloride slightly exceeded a proposed State groundwater quality commercial/industrial volatilization criterion. Institutional controls in the form of ELURs would be implemented to prevent construction of new buildings to prevent future vapor intrusion risks (LEA, 2014). The ELURs were completed during 2017.

## Remedial Investigation and Feasibility Study (RI/FS)

### 1. 1993 Remedial Investigation

Results from the 1993 RI concluded that the primary sources of groundwater contamination at the Site are wastes, including liquid organic solvents and semi-solid organic sludges, deposited in the landfill during its operation. Deposition of limited amounts of metal-containing wastes has also contributed to localized areas of elevated levels of certain metals in groundwater beneath the landfill.

Overall, the RI results indicated that industrial-related chemical waste was deposited primarily in the southern portion of the landfill. VOCs were detected in soils at sporadically high concentrations throughout this portion of the landfill. VOCs were

detected in shallow, intermediate, and deep overburden groundwater exceeding the federal Maximum Contaminant Levels (MCLs).

Low to moderate concentrations of several other contaminants, including semi-volatile organic compounds (SVOCs) [primarily polycyclic aromatic hydrocarbons (PAHs)], polychlorinated biphenyl compounds (PCBs) and some metals, were also detected. The 1993 RI also identified two areas (SSDA 1 and SSDA 2), where semi-solid industrial waste materials contaminated with relatively high levels of VOCs and/or SVOCs were deposited. EPA determined that SSDA 1 was to be considered a "hot spot" due to contaminants levels being substantially higher than those found throughout the landfill, whereas levels of contamination in SSDA 2 were consistent with those found throughout the southern portion of the landfill. Past records and results also indicated that the northern portion of the landfill was primarily used as a dump for stumps and demolition debris with waste materials including wood, ash, cinders, and some brick and asphalt. Moderate concentrations of PAHs were detected in soils at certain locations in the northern portion of the landfill. Approximately one third of the waste in the southern portion of the landfill remains below the water table.

### 2. 2006 Supplemental Remedial Investigation (OU2)

The results of the 2006 SRI confirmed that groundwater flow beneath the landfill is westerly; however, as groundwater flows away from the landfill towards the Quinnipiac River, the flow becomes northwesterly. Groundwater present near the Site includes an overburden aquifer and a bedrock aquifer. Overall, groundwater flow was postulated to generally follow the bedrock topography, flowing along a west-northwest trending bedrock trough, with the impact of the bedrock topography being potentially

greater on the flow in the deeper portions of the aquifer. Hydrogeologic evaluations also indicated that the bedrock surface rises in the western part of the area studied, pinching out the overburden groundwater aquifer west of the Quinnipiac River.

Groundwater migrating westward from the Site contains dissolved contaminants derived from the waste disposed in the southern portion of the Site, and flows relatively quickly downward into the deeper overburden aquifer. This phenomenon appears to be due to significant differences in the relatively low permeability of the waste versus the high permeability of the underlying sand and gravel layer. Contaminants are then transported at depth to the west by regional groundwater flow. Contaminants from the northern portions of the landfill move downward more slowly and migrate greater distances through the shallow aquifer immediately west and northwest of the landfill.

## 3. 1994 Feasibility Study (OU1)

Using the information gathered from the 1993 RI, HHRA, and other technical documents, EPA identified several source control response objectives to use in developing alternatives to prevent or minimize the release of contaminants from the Site. A comprehensive evaluation of containment and management of contaminated groundwater migration from the landfill was addressed by the final response action. A presumptive remedy for CERCLA municipal landfills was selected, which consisted primarily of containment (capping) of the landfill waste and gas collection/treatment. Capping of the landfill waste along with collection of landfill gases, and if necessary, treatment, was the presumptive containment remedy selected in the FS for this Site. In this FS, the remedy was combined with other remedial actions that addressed source control of the landfill wastes. The presumptive remedy did not address exposure

pathways outside the source area (landfill) such as groundwater. The following 2006 Amended Feasibility Study addressed groundwater.

## 4. 2006 Amended Feasibility Study (OU2)

In 2006, an Amended Feasibility Study (AFS) developed remedial alternatives for the remediation of groundwater, provided a detailed evaluation on the remedial alternatives, and performed a comparative analysis of the two remedial alternatives identified as (1) Alternative GW-1: No Action, and (2) Alternative GW-2: Institutional Controls/Groundwater Monitoring/Building Ventilation/Vapor Barriers. Alternative GW-2 was chosen as the selected groundwater remedy for the Site.

#### **Selected Remedies**

The September 1994, ROD for the Interim Remedial Action for Limited Source Control addressed the following Remedial Action Objectives (RAOs):

- minimize the current and future effects of landfill contaminants on groundwater quality, specifically, reducing to a minimum the amount of precipitation allowed to infiltrate through the unsaturated waste column and contaminate the groundwater;
- eliminate potential future risks to human health through direct contact with landfill contaminants by maintaining a physical barrier;
- control surface water run-on, run-off, and erosion at the Site;
- prevent risks from uncontrolled landfill gas migration and emissions;
- comply with state and federal applicable or relevant and appropriate requirements (ARARs); and

 minimize potential impacts of implementing the selected limited source control alternative on adjacent surface waters and wetlands.

Additional groundwater studies followed and in September 2006, EPA issued a ROD for the final selected remedy that addresses potential risks from vapor intrusion into buildings above the shallow VOC plume in groundwater (2006 ROD). This remedy addressed the following remedial action objective (RAO): prevent inhalation of VOCs by occupants of residential/commercial/industrial buildings resulting from volatilization of VOCs in groundwater, in excess of  $10^{-4}$  to  $10^{-6}$  cancer risk, a Hazard Index > 1, and/or comply with applicable or relevant and appropriate volatilization criteria.

## Response Actions

## 1. 1994 ROD Findings & Remedial Activities

The remedial action selected in the 1994 ROD (for OU1, the landfill) was based principally upon EPA's *Presumptive Remedy for CERCLA Municipal Landfill Sites*, EPA Document No. 540-F-93-035. (Presumptive Remedy Guidance) (EPA, 1993). The 1994 ROD addressed all affected media (i.e. soil, soil gas, surface water, and sediment) at the landfill, at the adjacent Black Pond, and at the Unnamed Stream across Old Turnpike Road west of the landfill. By July 2001 physical construction of the OU1 (landfill) remedy was substantially completed and the operation and maintenance (O & M) activities and long-term monitoring (LTM) had started.

The northern 4-acre portion of the landfill Site was redeveloped for passive recreational use. This part of the landfill is landscaped with trees and shrubs along its

perimeter and abuts Black Pond. It is regularly mowed by the Town of Southington (a PSD). There is a 3-foot high chain link fence that encircles this part of the landfill along Old Turnpike Road to the west and Rejean Road to the north. The fence has an opening, which allows for pedestrian access. People can walk their dogs, sit and watch the naturally existing wildlife, and/or take their kayak or canoe out onto Black Pond. The southern portion of the landfill is secured with a 6-foot high chain link fence and public access is not allowed. The reason for prohibiting public access to this part of the landfill is to prevent potential damage to the low-permeability cap, which could in turn allow rainwater infiltration and direct contact with highly contaminated industrial waste.

The 2006 SRI determined that there were no receptors downgradient of the Site that could be affected by the plume and that Site-related groundwater contaminants of concern (COCs) downgradient of the Site do not adversely impact environmental media other than groundwater. Groundwater COCs are transported as a narrow plume in the lower portion of the aquifer, remain in the lower portion of the aquifer, with ultimate discharge into the Quinnipiac River Basin west-northwest of the Site. The also determined that non-VOC COCs from the Site in groundwater do not exceed applicable regulatory criteria. Based on the SGI's hydraulic studies, it was determined that contaminated groundwater underlying the landfill does not discharge into Black Pond or the unnamed stream and wetlands.

Confirmation of the passive landfill gas collection system's effectiveness was conducted through several means. After the gas collection system was installed and the landfill was capped, three rounds of seasonal vapor data were collected directly from the landfill gas vents and a risk assessment was conducted. The data results indicated that

the gas vents were operating effectively and there was no risk found to human health or to the environment.

As part of the 2010 Five-Year Review, a helium tracer study was conducted in the northern part of the landfill to simulate potential landfill gas migration, low levels of helium were detected outside the landfill. Therefore, as a precautionary measure, the PSDs installed an impermeable vertical gas barrier trench that extends into the water table just outside the landfill cap to prevent possible landfill gas from migrating off-Site to the northern neighborhood. The PSDs performed a similar evaluation of the gas vents data in the southern portion of the landfill and found no risk being posed to human health or the environment. All vents continue to be periodically checked through long-term monitoring (LTM) and O&M programs.

## 2. 2006 ROD Findings & Remedial Activities

This ROD memorialized the remedy to reduce potential risks from the migration of volatile contaminants to indoor air within buildings located above groundwater contamination. The components of this remedy complement those in the 1994 ROD.

The major components of the 2006 ROD are as follows:

i. Institutional controls, in the form of Environmental Land Use Restrictions (ELURs) as defined in Connecticut's Remediation Standard Regulations (CT RSRs) will be placed on properties or portions of properties where groundwater Volatile Organic Compound (VOC) concentrations exceed the CT RSR volatilization criteria for residential or commercial/industrial use, or criteria listed in Table L-1 of the 2006 ROD. Periodic inspections are required to ensure compliance with the institutional controls and to ensure proper notification to EPA and the State, as necessary.ii. Building ventilation (sub-slab depressurization systems or similar technology) will be used in existing buildings located over portions of properties where VOCs in groundwater exceed the CT RSR's volatilization criteria or criteria listed in Table L-1 of the 2006 ROD to prevent migration of VOC vapors into buildings. Similarly, vapor barriers (or similar technology) or sub-slab depressurization (or similar technology) will be used to control vapors in new buildings.

iii. Groundwater monitoring will be conducted in areas where the potential for vapor intrusion is a concern. Such areas include, but are not limited to, the two parcels that are the initial focus of this remedial action Chuck & Eddy's (C&E) and the Radio Station. Compliance wells will be installed at appropriate locations, to collect groundwater to evaluate long-term fluctuations in accordance with the monitoring requirements of the CT RSRs and other federal requirements to ensure the protectiveness of the remedy in the future.

iv. Conduct operation, maintenance, and monitoring of engineering and institutional controls to ensure remedial measures are performing as intended and continue to protect human health and the environment in the long-term.

v. Five-year reviews.

The 2006 ROD addresses the threat presented by vapor intrusion through engineering controls, institutional controls, long-term monitoring, and Five Year Reviews to prevent potential exposure to contamination that presents an unacceptable risk to

human health. Engineering controls (i.e., vapor mitigation systems) will only be installed in the future if criteria listed in Table L-1 of the 2006 ROD are exceeded and/or if new buildings are constructed on properties of concern.

In August 2010 further testing was performed at the Highland Hills neighborhood and the results confirmed that there is no vapor intrusion risk to this neighborhood and thus no further action is necessary in this area. To confirm that any groundwater contamination that far from the landfill edge would be at depths greater than 15 feet and not pose a vapor intrusion risk, groundwater samples were collected sequentially in discrete vertical intervals and analyzed and compared to criteria presented in Table L-1 of the 2006 ROD. Groundwater samples from two consecutive 1 foot intervals and subsequently every 5 feet down to 60 feet were collected and analyzed. There were no exceedances of any of the volatilization criteria in the upper 30 feet of the aquifer. These results confirm the conceptual Site model that there is no vapor intrusion pathway in groundwater below the Highland Hills subdivision and therefore no vapor intrusion risk.

An investigation was conducted by the PSDs with EPA oversight in 2011 to confirm that the Site's groundwater plume was not migrating towards the portion of the aquifer classified by the State as GA [potable], situated to the south and southwest of the landfill. The investigation results demonstrated that the groundwater that is moving through the Landfill moves in a west/northwest direction, which continues to support the conceptual Site model for groundwater flow and contaminant transport. Thus, the Site groundwater plume does not flow toward or impact the GA aquifer. A more detailed description of this investigation and findings can be found in the *GA Boundary Investigation Report* (LEA, September 2011).

A Vapor Intrusion Groundwater Investigation was performed by the PSDs during 2011 to assess the potential for vapor intrusion at the C&E's Property, the Radio Station Property, and at two locations along Nunzio Drive and Barbara Lane (located southwest of the Site). Soil boreholes were advanced at select locations and monitoring wells were installed. Soil and groundwater samples were collected from these locations for analysis. Soil vapor probes were installed in occupied structures at the C&E's Property and the Radio Station Property. Four quarterly rounds of soil vapor and groundwater samples were collected from June 2010 through September 2011. Only vinyl chloride was identified as slightly exceeding the criteria presented in Table L-1 of the 2006 ROD. No VOCs were detected at concentrations exceeding the State RSRs for soil vapor (LEA, 2014). Therefore, construction of remedial vapor mitigation systems for existing structures at the C&E's Property and the Radio Station Property identified in the 2006 ROD was unnecessary. However, a passive vapor barrier was installed under the concrete slab for a new structure built in 2010 at the C&E's Property.

Residents and businesses have been permanently relocated from the landfill. The landfill has been properly capped and a soil gas collection system and impermeable gas barrier have been installed at the landfill. Therefore, there is no risk to human health or the environment from coming in contact with the landfill soil or landfill gas. In addition, everyone who lives or works in the area over the groundwater plume is connected to a municipal water supply, and so there is no ingestion or dermal contact with the contaminated groundwater. The route of potential exposure to human health is through vapor intrusion in the shallow groundwater that could potentially migrate into buildings. The 2006 remedy addresses this issue through long-term monitoring and implementation

of vapor intrusion engineering controls and institutional controls. The components of 1994 and the 2006 remedies are functioning effectively as designed.

# **Cleanup Levels**

Attainment of Groundwater Restoration Cleanup Levels is not a Remedial Action Objective at this Site. The final groundwater remedy is not designed to clean up or restore groundwater but to address potential risks from vapor intrusion into buildings located above shallow groundwater contaminated from the Site (EPA, 2006).

## **Operation and Maintenance**

There is an ongoing O&M program instituted for the 1994 remedy that includes landfill cover maintenance, cap effectiveness monitoring (groundwater monitoring and gas vent monitoring), and landfill inspection. An Operation and Maintenance Plan was prepared in 2001 that details the inspections, maintenance, and monitoring activities (CRA, 2001). An inspection plan was developed to ensure integrity of the cover system. Routine inspections of the Site include observing and recording the height of grass cover and areas of settlement and/or ponding. A security inspection that includes a fence perimeter inspection and a visual inspection of trespasser or disturbance activity is also conducted periodically. The PSDs' contractor performs the cap effectiveness monitoring, inspections, non-routine maintenance. One PSD (Town of Southington) performs the soil cover maintenance on a routine basis (removal of debris and grass cutting).

For the 2006 remedy, it was determined that no sub-slab vapor mitigation system was required for either the existing C&E property or the Radio Station buildings.

However, as a preventative measure any new construction of new buildings or additions

to existing buildings would require sub-slab and/or engineering vapor intrusion mitigation measures. In 2010, a pre-fabricated building was constructed at the C&E property with the placement of a passive vapor barrier. This barrier was installed under the direction of the C&E property owner without EPA or CT DEEP oversight. As a result, in 2011 a second geomembrane was proposed for installation under the concrete slab as a passive vapor intrusion barrier. EPA and CTDEEP reviewed and approved the design. The installation with oversight, was approved by EPA and CT DEEP. A Vapor Intrusion Inspection Plan (VIIP) was developed by LEA in March 2018 that specifies inspection frequency on a biennial basis with mitigation steps as necessary. The VIIP is included in Appendix N of the Remedial Action Completion Report (LEA, 2018).

## **Institutional Controls Implemented**

Institutional controls have been implemented for properties that comprise the Site and two properties located downgradient of the capped landfill to prevent consumption of groundwater, prevent activities that would compromise the integrity of the landfill cap, and restrict construction of structures over contaminated groundwater that exceed state groundwater standards with regard to preventing vapor intrusion exposures. These institutional controls address the requirements of both the 1994 and 2006 RODs. The institutional controls are environmental restrictions in the forms of "Declarations of Land Use Restrictive Covenants or "Declarations of Environmental Land Use Restrictions (ELURs)".

The September 14, 2010 ELURs were executed by the Town of Southington for the three Town-owned parcels located in the northern area of the capped landfill. In the

ELURs, the Town agreed to: 1) place notice of the restrictions on the deed, title, or other instrument and have it continue into perpetuity; 2) prohibit any use of any portion of the property that will disturb any of the remedial measures (except for maintenance and repair upon prior approval by EPA); 3) prohibit any activities that could result in exposure to contaminants in the subsurface soils and groundwater; 4) prohibit any future residential and commercial development on the property; 5) prohibit use or consumption of contaminated groundwater underlying the property; and 6) grant access to EPA, including its contractors, and the State for the purpose of conducting any activity related to the CDs. Finally, EPA, the State, and/or the PSDs have the right to enforce the ELURs. The April 9, 2018 ELURs were implemented for one Town-owned parcel located in the southern area of the capped landfill, which has the same restrictions as the September 14, 2010 ELURs.

In September 17, 2015 ELURs were implemented by the CT DEEP for the remaining 9 state-owned parcels of the landfill. These ELURs have the same six restrictions as those described in the September 14, 2010 ELURs, plus an additional restriction that requires any new structure to be constructed in accordance to a plan approved by EPA that minimizes the risk of inhalation of contaminants. In addition, this ELUR indicates EPA and/or the PSDs have the right to enforce the restriction.

The April 19, 2017 ELUR was recorded by the owners of the Radio Station Property. In this ELUR, the owners agreed to: 1) restrict the construction of a building over groundwater at the Subject Area where volatile organic compounds concentrations exceed the RCSA Section 22a-133k-1(75) Volatilization Criteria (unless a release is obtained from the CT DEEP); 2) allow no action or inaction which would allow a risk of

pollutant migration, or potential hazard to human health or the environment; or result in the disturbance of structural integrity of engineering controls used to contain pollutants or limit human exposure; 3) in the event of an emergency, notify the CT DEEP, implement measures to limit actual or potential risks to human health and the environment, implement a plan to ensure restoration of the property to conditions prior to the emergency; 4) not allow alterations to the property inconsistent with the ELUR until a release is approved by the CT DEEP; 5) allows access to the CT DEEP agents that perform pollution remediation activities; 6) allow access onto the property by the CT DEEP upon reasonable notice; and 7) require the property owner to notify any future interests of the ELUR requirements. This ELUR is enforceable by the CT DEEP.

The June 22, 2017 Declaration of ELUR was recorded by the owner of the property where the C&E's Used Auto Parts business is located. This ELUR has the same seven restrictions as described in the April 2017 ELUR.

#### **Five-Year Review**

Hazardous substances will remain at the Site above levels that allow unlimited use and unrestricted exposure after the completion of the action. Pursuant to CERCLA §121(c) and as provided in the current guidance on Five-Year Reviews (OSWER Directive 9355.7-03B-P, June 2001), EPA must conduct statutorily required Five-Year Reviews. The first Five-Year Review was conducted in September 2005. The second and third Five-Year Reviews were completed in September 2010 and in September, 2015, respectively. The September 2015 Five-Year Review found the Site remedy currently protective of human health and the environment. There was one issue and

recommendation, to complete the Institutional Controls at the C&E property and the Radio Station Property. The PSDs continued to work collaboratively with CT DEEP and the property owners at these two properties and in June 2017 institutional controls, in the form of ELURs, were finalized. These actions completed the 2015 Five Year Review recommendation. The remedy is protective of human health and the environment. The next Five Year Review is scheduled for September 2020.

### **Community Involvement**

From approximately 1988 through 2002, community concern and involvement was high at this Site. EPA kept the community and other interested parties apprised of the Site's activities through informational meetings, fact sheets, press releases and public meetings. In October 1988, EPA released a community relations plan that outlined a program to address community concerns to keep citizens informed and involved with remedial activities. On December 14, 1988, EPA held an informational meeting in the Southington Public Library to describe the plans for the Remedial Investigation and Feasibility Study. In January 1993, a \$50,000 technical assistance grant was awarded by EPA to a local group of citizens who called themselves, Southington of Landfill Victims, (SOLV) to hire a technical consultant to help them better understand the Site's technical data and information. This consultant provided the group technical assistance in interpreting technical documents relating to the remedial investigation, human and ecological risk assessments, remedial design, and remedial action. On May 23, 1994, EPA completed the administrative record which included documents that were used by EPA to propose the remedy for the Site. These documents were available for public

review at EPA's offices in Boston, Massachusetts and at the Site Repository at the Southington Public Library, Southington, CT

The Proposed Plan was made available to the public on May 23, 1994.

On June 14, 1994, EPA held a public meeting to discuss the results of the Remedial Investigation, the cleanup activities presented in the FS and to present the Agency's Proposed Plan. This was followed by a 30-day comment period. On June 29, 1994 residents requested an additional 30-day comment period to August 13, 1994, which was granted by EPA.

On July 12, 1994, the Agency held a public hearing to discuss the Proposed Plan and to accept oral comments. A transcript of this hearing and comments, along with the Agency's response to comments are included in the Responsiveness Summary found in Appendix A of the 1994 ROD.

In June 2006 EPA issued a second Proposed Plan with a 60-day comment period from June 22, 2006 through August 24, 2006 for the final remedy to address vapor intrusion at properties downgradient of the landfill. On July 6, 2006 a public hearing was conducted to accept verbal comments. All comments were addressed in the responsiveness summary included in PART 3 of the 2006 ROD.

After the 1994 ROD remedy was implemented, community involvement and interest decreased significantly. EPA continues to conduct community outreach through its Five-Year Reviews or any time there is new information to share with the public.

EPA has worked closely with CT DEEP and the PSDs throughout the preparation of documentation for the deletion process. The community is being notified of EPA's intent to delete the Site from the NPL through the publication of this Notice of Intent to Delete

and the public will be provided with a 30-day comment period. EPA will take all of received comments into consideration and in consultation with CT DEEP, and will respond, as appropriate, to the comments in a responsiveness summary.

#### Determination that the Site Meets the Criteria for Deletion in the NCP

All Remedial Design and Remedial Action (RD/RA) activities at the Site were consistent with the 1994 ROD, the 2006 ROD, as well as all respective EPA Statements of Work provided by the PSDs. All selected remedial and removal action objectives and associated cleanup levels are consistent with agency policy and guidance. RA plans for all phases of construction included Quality Assurance Project Plans (QAPPs) which incorporated all EPA quality assurance and quality control procedures and protocols (where necessary). All procedures and protocols were followed for soil, groundwater, surface water, sediment, soil gas, and fish tissue sampling. EPA analytical methods were used for all validation and monitoring during all RA activities. EPA has determined that the analytical results were accurate to the degree needed to assure satisfactory execution of the RAs, and were consistent with the RODs and RD/RA plans and specifications.

All Institutional Controls are in place and currently EPA expects that no further Superfund response is needed to protect human health and the environment, other than future Five-Year Reviews, ongoing long-term monitoring, O&M, and inspections.

Confirmatory groundwater monitoring and institutional controls provide further assurance that the Site no longer poses any threats to human health or the environment.

Operation and maintenance activities were agreed upon by EPA, in consultation with CT

DEEP, and the PSDs in the 2001 O&M Plan and the 2018 Vapor Intrusion Monitoring

Plan (VIIP).

EPA has followed the procedures required by 40 CFR 300.425(e). The Site meets

all Site completion requirements as specified in OSWER Directive 9320.2-09-A-P, Close

Out Procedures for National Priorities List Sites. All cleanup actions specified in the

1994 and 2006 RODs have been achieved for all pathways of exposure. Therefore, no

further Superfund response is needed to protect human health and the environment.

A bibliography of all reports relevant to the completion of this Site under the

Superfund program are included in the administrative record for this deletion.

List of Subjects in 40 CFR Part 300

Environmental protection, Air pollution control, Chemicals, Hazardous waste,

Hazardous substances, Intergovernmental relations, Penalties, Reporting and

recordkeeping requirements, Superfund, Water pollution control, and Water supply.

Authority: 33 U.S.C. 1321(d); 42 U.S.C. 9601–9657; E.O. 13626, 77 FR 56749, 3

CFR, 2013 Comp., p. 306; E.O. 12777, 56 FR 54757, 3 CFR, 1991 Comp., p. 351; E.O.

12580, 52 FR 2923, 3 CFR, 1987 Comp., p. 193.

Dated: July 9, 2018.

Alexandra Dunn Regional Administrator

Region 1

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